What Is Claimed Is:

1. A sensor element for determining a physical property of a test gas, in particular the concentration of a gas component in a gas mixture, in particular the oxygen concentration in the exhaust gas of an internal combustion engine, comprising a solid electrolyte body (11), an external electrode (17) exposed to the test gas and situated on the solid electrolyte body (11), an internal electrode (18) situated in the solid electrolyte body (11), and an electrical resistance heater (25) which has a preferably meandering heating surface being situated in the solid electrolyte body (11), and is embedded in an electrical insulation (26), wherein the external electrode (17) is situated in a cavity (12) formed in the solid electrolyte body (11).

2. The sensor element as recited in Claim 1, wherein the external electrode (17) is situated on the bottom of the cavity (12) facing away from the outside of the solid electrolyte body (11).

3. The sensor element as recited in Claim 1 or 2, wherein the cavity (12) is designed to be open to the outside and is protected by a cover (13).

4. The sensor element as recited in Claim 3, wherein the cover (13) is comprised of a gas-permeable, porous material and closes the cavity (12).

5. The sensor element as recited in one of Claims 1 through 3, wherein at least one gas passage hole (27) leads to the cavity (12).

6. The sensor element as recited in Claim 5, wherein the at least one gas passage hole (27) is

incorporated in the solid electrolyte body (11) or in the cover (13) closing the cavity (12).

7. The sensor element as recited in one of Claims 1 through 6,
wherein the solid electrolyte body (11) has a second cavity (22) which is formed close to the outside of the solid electrolyte body (11) facing away from the first cavity (21) and extends over the area of the heating surface (251).

8. The sensor element as recited in Claim 7,
wherein the cavity (22) is incorporated from the outer side of the solid electrolyte body (11) facing away from the external electrode (17) and is closed by a second cover (23).

9. The sensor element as recited in Claim 8,
wherein the bottom of the second cavity (22) opposite the second cover (23) is provided with a coating (24) having low emissivity.

10. The sensor element as recited in Claim 9,
wherein the coating (24) is made of high-melting noble metals or their oxides, preferably of platinum or ruthenium oxide.

11. The sensor element as recited in one of Claims 1 through 10,
wherein the cavity (12, 22) is filled with a porous material, preferably a highly porous ceramic.

12. The sensor element as recited in one of Claims 2 through 11,
wherein braces are positioned in the cavity (12, 22) to brace the cover (13, 23) against the bottom of the cavity (12, 22).

13. The sensor element as recited in one of Claims 3 through 12,
wherein the cover (13, 23) is made of a material having a higher thermal coefficient of expansion than the material of the solid electrolyte body (11).

14. The sensor element for a wideband lambda sensor as recited in one of Claims 1 through 13,
wherein the internal and external electrodes (17, 18) form a pump cell, a reference gas channel (15) and a test gas chamber (14) connected to the first cavity (12) via a diffusion barrier (20) are formed in the solid electrolyte body (11), the internal electrode (18) and a test or Nernst electrode (19) opposite therefrom are situated within the test gas chamber (14), and a reference electrode (21) is situated within the reference gas channel (15).

15. The sensor element as recited in Claim 14,
wherein the cavities (12, 22) extend over areas that cover the spatial arrangement of electrodes (17, 18, 19, 21).